

Patent
Attorney Docket No.: P10-1215.DIV

IN THE CLAIMS

The following is a replacement claim set.

1-6. (cancelled)

7. (currently amended) A cross-linkable, expandable blank for an elastomeric safety support, the support having a cellular structure comprising closed cells, said support being capable of being mounted on a wheel rim within a tire, said blank comprising a diene elastomer having a molar ratio of diene units of less than 15%, a blowing agent and water, the water in an amount of from 3 to 6 phr.

8. (currently amended) A cross-linkable expandable blank for an elastomeric safety support, the support having cellular structure comprising closed cells, said support being capable of being mounted on a wheel rim within a tire, said blank comprising a diene elastomer having a molar ratio of diene units of less than 15%, a blowing agent, water in an amount of about 3 to 6 phr and a reinforcing filler comprising silica in an amount of from 10 to 30 phr and carbon black.

9. (currently amended) The cross-linkable expandable blank according to Claim 7, wherein the diene elastomer is a copolymer of isobutylene and a co-monomer selected from between isoprene [[and]] or paramethylstyrene.

10. (previously presented) A cross-linked expanded elastomeric safety support capable of being mounted on a wheel rim within a tire and having a cellular structure comprising closed cells obtained by a process comprising:

kneading by thermomechanical working a rubber composition comprising a diene elastomer having a molar ratio of diene units of less than 15%, water in an amount of from 3 to 6 phr, a blowing agent that provides for formation of the cellular structure and a vulcanization system;

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forming the rubber composition after thermomechanical working into a cross-linkable expandable support blank;

curing the blank in a mold process followed by demolding the cured blank; and

expanding by decomposing the blowing agent and vulcanizing the cured blank, said support comprising a reinforcing filler comprising silica in an amount of from 10 to 30 phr and a blowing agent in an amount greater than 2 phr.

11. (previously presented) A cross-linked expanded elastomeric safety support capable of being mounted on a wheel rim within a tire and having a cellular structure comprising closed cells obtained by a process comprising:

kneading by thermomechanical working a rubber composition comprising a diene elastomer having a molar ratio of diene units of less than 15%, water in an amount of from 3 to 6 phr, a blowing agent that provides for formation of the cellular structure and a vulcanization system;

forming the rubber composition after thermomechanical working into a cross-linkable expandable support blank;

curing the blank in a mold process followed by demolding the cured blank; and

expanding by decomposing the blowing agent and vulcanizing the cured blank, said support comprising a reinforcing filler comprising silica in an amount of from 10 to 30 phr and azobisformamide in an amount greater than 2 phr.

12. (previously presented) The cross-linked safety support of Claim 10, wherein the support comprises the blowing agent in an amount greater than 5 phr.

13. (previously presented) The cross-linked safety support of Claim 11, wherein the support comprises azobisformamide in an amount greater than 5 phr.

14. (currently amended) The cross-linked support of Claim 10, wherein the diene elastomer is a copolymer of isobutylene and a co-monomer selected from between isoprene [[and]] or paramethylstyrene.

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15. (currently amended) The cross-linked support of Claim 11, wherein the diene elastomer is a copolymer of isobutylene and a co-monomer selected from between isoprene [[and]] or paramethylstyrene.

16. (cancelled)

17. (previously presented) The cross-linked expanded elastomeric safety support of Claim 10, wherein said rubber composition further comprises a reinforcing filler comprising silica in an amount of from 10 to 30 phr and carbon black.

18. (previously presented) The cross-linked expanded elastomeric safety support of Claim 11, wherein said rubber composition further comprises a reinforcing filler comprising silica in an amount of from 10 to 30 phr and carbon black.

19. (previously presented) The cross-linked safety support of Claim 17, wherein the support comprises the blowing agent in an amount greater than 5 phr.

20. (previously presented) The cross-linked safety support of Claim 18, wherein the support comprises azobisformamide in an amount greater than 5 phr.

21. (currently amended) The cross-linked support of Claim 17, wherein the diene elastomer is a copolymer of isobutylene and a co-monomer selected from between isoprene [[and]] or paramethylstyrene.

22. (currently amended) The cross-linked support of Claim 18, wherein the diene elastomer is a copolymer of isobutylene and a co-monomer selected from between isoprene [[and]] or paramethylstyrene.

23. (currently amended) The cross-linkable blank according to Claim 8, wherein the diene elastomer is a copolymer of isobutylene and a co-monomer selected from between isoprene [[and]] or paramethylstyrene.

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24. (previously presented) The cross-linkable expanded blank according to Claim 7, wherein the blowing agent is in an amount sufficient to provide the elastomeric safety support with an amount of the blowing agent greater than 2 phr.

25. (previously presented) The cross-linkable expanded blank according to Claim 7, wherein the blowing agent is in an amount sufficient to provide the elastomeric safety support with an amount of the blowing agent greater than 5 phr.

26. (previously presented) The cross-linkable expanded blank according to Claim 7, wherein the blowing agent is in an amount between about 15 phr and about 30 phr.

27. (previously presented) The cross-linkable expanded blank according to Claim 26, wherein the blowing agent is azobisformamide.

28. (previously presented) The cross-linkable expandable blank according to Claim 8, wherein the blowing agent is in an amount sufficient to provide the elastomeric safety support with an amount of the blowing agent greater than 2 phr.